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Amendments to Claims:

Please amend the claims as follows. This listing of claims will replace all prior versions of the claims in the application.

1. (Currently Amended) A computer-readable medium having comprising software stored thereon for operating a video surveillance system, comprising code segments for operating the video surveillance system based on video primitives, wherein the code segments for operating the video surveillance system comprise:

(A) code segments for determining identifying one or more user-defined event discriminators, each user-defined event discriminator to detect an occurrence of a user-defined event in a video of the video surveillance system, each user-defined event comprising a description of at least one object engaged in an activity in the video, a description of at least one object engaged in an activity having one or more spatial attributes in the video, a description of at least one object engaged in an activity having one or more temporal attributes in the video, or a description of at least one object engaged in an activity having one or more spatial attributes and one or more temporal attributes in the video, the object being an item of interest in the video;

(B) code segments for extracting video primitives from the a video regardless of what or when event discriminators are defined, each video primitive extracted being independent of any user-defined event described by the user-defined event discriminators, wherein extracting video primitives comprises:

(1) identifying one or more objects in the video to obtain identified objects, each object being an item of interest in the video, wherein identifying one or more objects comprises at least one of:

(a) detecting one or more objects in the video;

(b) tracking one or more objects in the video; or

(c) classifying one or more objects in the video; and

(2) identifying at least one video primitive for each identified object in the video independent of any user-defined event described by any user-defined event discriminator, each video primitive describing a property of one of the identified objects, each property being an observable attribute of the identified object in the video; and

(C) code segments for checking the extracted video primitives against at least one of the user-defined event discriminators to determine whether any user-defined events described by the checked user-defined event discriminators occurred in the video, wherein checking the extracted video primitives comprises:

(1) comparing the properties of the video primitives with the description of the user-defined event of one of the user-defined event discriminators; and

(2) determining a user-defined event occurred in the video according to one of the user-defined event discriminators if the properties of the video primitives match the description of the user-defined event of one of the user-defined event discriminators;

wherein the code segments for extracting video primitives are different from the code segments for checking the extracted video primitives

~~code segments for extracting event occurrences from the extracted video primitives using at least one of the one or more user-defined event discriminators, wherein the code segments for extracting event occurrences are different from the code segments for extracting video primitives;~~

~~wherein each video primitive is an observable attribute of an object viewed in the video;~~

~~wherein the video primitives are at least one of the following: a size, a shape, a color, a~~

~~texture, a velocity, a speed, an internal motion, a feature of a salient motion, or a feature of a scene change.~~

2. (Cancelled)

3. (Cancelled)

4. (Currently Amended) A computer-readable medium as in claim 1, further comprising:
(D) code segments for archiving the extracted video primitives;
wherein the archived video primitives are accessible without reprocessing the video.

5. (Currently Amended) A computer-readable medium as in claim 1, further comprising
code segments for undertaking a response based on the checked extracted video primitives
~~extracted event occurrences.~~

6. (Original) A computer-readable medium as in claim 5, wherein the response
comprises initiating another sensor system.

7. (Original) A computer-readable medium as in claim 1, further comprising code
segments for calibrating the video surveillance system.

8. (Original) A computer-readable medium as in claim 7, wherein the code segments for
calibrating comprise code segments for self-calibrating the video surveillance system.

9. (Original) A computer-readable medium as in claim 8, wherein the code segments for self-calibrating comprise:

code segments for detecting as least one object in a source video; and
code segments for tracking the object.

10. (Original) A computer-readable medium as in claim 9, wherein the code segments for detecting at least one object comprise:

code segments for detecting at least one object via motion of the object; and
code segments for detecting at least one object via change in a background model.

11. (Original) A computer-readable medium as in claim 7, wherein the code segments for self-calibrating comprise:

code segments for identifying trackable areas; and
code segments for identifying typical sizes of typical objects.

12. (Original) A computer-readable medium as in claim 7, wherein the code segments for calibrating comprise:

code segments for manual calibration;
code segments for semi-automatic calibration; and
code segments for automatic calibration.

13. (Cancelled)

14. (Currently Amended) A computer-readable medium as in claim 1 13, wherein at least one user-defined event comprises a description of at least one object engaged in an activity in the video ~~the code segments for tasking comprise code segments for identifying at least one object.~~

15. (Currently Amended) A computer-readable medium as in claim 1 13, wherein at least one user-defined event comprises a description of at least one object engaged in an activity having one or more spatial attributes in the video ~~the code segments for tasking comprise code segments for identifying at least one spatial area.~~

16. (Currently Amended) A computer-readable medium as in claim 1 13, wherein at least one user-defined event comprises a description of at least one object engaged in an activity having one or more temporal attributes in the video ~~the code segments for tasking comprise code segments for identifying at least one temporal attribute.~~

17. (Currently Amended) A computer-readable medium as in claim 1 13, wherein at least one user-defined event comprises a description of at least one object engaged in an activity having one or more spatial attributes and one or more temporal attributes in the video ~~the code segments for tasking identify at least one interaction.~~

18. (Currently Amended) A computer-readable medium as in claim 1 13, wherein at least one user-defined event comprises ~~the code segments for tasking identify~~ at least one alarm.

19. (Currently Amended) A computer-readable medium as in claim 1, wherein the video primitives are from at least one of a video sensor ~~or~~ and another sensor.

20. (Cancelled)

21. (Original) A computer system comprising the computer-readable medium of claim 1.

22. (Cancelled)

23. (Cancelled)

24. (Currently Amended) A method ~~computer-readable medium~~ as in claim ~~25~~ 22, further comprising ~~code segments for~~ undertaking a response based on the checked extracted video primitives ~~extracted event occurrences~~.

25. (Currently Amended) A method ~~comprising the step of for~~ operating a video surveillance system, ~~based on video primitives, wherein operating the video surveillance system comprises the steps of~~ comprising:

(A) determining identifying one or more user-defined event discriminators, each user-defined event discriminator to detect an occurrence of a user-defined event in a video of the video surveillance system, each user-defined event comprising a description of at least one object engaged in an activity in the video, a description of at least one object engaged in an activity

having one or more spatial attributes in the video, a description of at least one object engaged in an activity having one or more temporal attributes in the video, or a description of at least one object engaged in an activity having one or more spatial attributes and one or more temporal attributes in the video, the object being an item of interest in the video;

(B) extracting video primitives from the a video regardless of what or when event discriminators are defined, each video primitive extracted being independent of any user-defined event described by the user-defined event discriminators, wherein extracting video primitives comprises:

(1) identifying one or more objects in the video to obtain identified objects, each object being an item of interest in the video, wherein identifying one or more objects comprises at least one of:

(a) detecting one or more objects in the video;

(b) tracking one or more objects in the video; or

(c) classifying one or more objects in the video; and

(2) identifying at least one video primitive for each identified object in the video independent of any user-defined event described by any user-defined event discriminator, each video primitive describing a property of one of the identified objects, each property being an observable attribute of the identified object in the video; and

(C) checking the extracted video primitives against at least one of the user-defined event discriminators to determine whether any user-defined events described by the checked user-defined event discriminators occurred in the video, wherein checking the extracted video primitives comprises:

(1) comparing the properties of the video primitives with the description of the

user-defined event of one of the user-defined event discriminators; and

(2) determining a user-defined event occurred in the video according to one of the user-defined event discriminators if the properties of the video primitives match the description of the user-defined event of one of the user-defined event discriminators;

wherein extracting video primitives is separate from checking the extracted video primitives

~~extracting event occurrences from the video primitives using at least one of the one or more user-defined event discriminators;~~

~~wherein each video primitive is an observable attribute of an object viewed in the video;~~

~~wherein the video primitives are at least one of the following: a size, a shape, a color, a texture, a velocity, a speed, an internal motion, a feature of a salient motion, or a feature of a scene change.~~

26. (Cancelled)

27. (Currently Amended) A An apparatus for video surveillance system, wherein the apparatus is adapted to perform video surveillance based on video primitives, wherein the apparatus is adapted to comprising:

(A) means for determining identifying one or more user-defined event discriminators, each user-defined event discriminator to detect an occurrence of a user-defined event in a video of the video surveillance system, each user-defined event comprising a description of at least one object engaged in an activity in the video, a description of at least one object engaged in an activity having one or more spatial attributes in the video, a description of at least one object

engaged in an activity having one or more temporal attributes in the video, or a description of at least one object engaged in an activity having one or more spatial attributes and one or more temporal attributes in the video, the object being an item of interest in the video;

(B) means for extracting extract-video primitives from the a video regardless of what or when event discriminators are defined, each video primitive extracted being independent of any user-defined event described by the user-defined event discriminators, wherein the means for extracting video primitives comprises:

(1) means for identifying one or more objects in the video to obtain identified objects, each object being an item of interest in the video, wherein the means for identifying one or more objects comprises at least one of:

(a) means for detecting one or more objects in the video;

(b) means for tracking one or more objects in the video; or

(c) means for classifying one or more objects in the video; and

(2) means for identifying at least one video primitive for each identified object in the video independent of any user-defined event described by any user-defined event discriminator, each video primitive describing a property of one of the identified objects, each property being an observable attribute of the identified object in the video; and

(C) means for checking the extracted video primitives against at least one of the user-defined event discriminators to determine whether any user-defined events described by the checked user-defined event discriminators occurred in the video, wherein third unit to check the extracted video primitives comprises:

(1) means for comparing the properties of the video primitives with the description of the user-defined event of one of the user-defined event discriminators; and

(2) means for determining a user-defined event occurred in the video according to one of the user-defined event discriminators if the properties of the video primitives match the description of the user-defined event of one of the user-defined event discriminators;

wherein the means for extracting video primitives is different from the means for checking the extracted video primitives

~~extract event occurrences from the video primitives using at least one of the one or more user-defined event discriminators;~~

~~wherein each video primitive is an observable attribute of an object viewed in the video;~~

~~wherein the video primitives are at least one of the following: a size, a shape, a color, a texture, a velocity, a speed, an internal motion, a feature of a salient motion, or a feature of a scene change.~~

28. (Previously Presented) The apparatus of claim 27, wherein the apparatus comprises application-specific hardware to emulate a computer and/or software.

29. (Currently Amended) A computer-readable medium as in claim 1, wherein at least one user-defined event discriminator is further checked against occurrences are extracted based on video primitives and non-video primitives.

30. (Currently Amended) A computer-readable medium as in claim 1, further comprising code segments for determining ~~identifying~~ the one or more user-defined event discriminators using a user interface.

31. (Cancelled)

32. (Cancelled)

33. (Currently Amended) The apparatus ~~Application-specific hardware~~ as in claim 28 ~~32~~, wherein further comprising self-calibrating the application-specific hardware is self-calibrating for performing video surveillance.

34. (Currently Amended) A method ~~Application-specific hardware~~ as in claim 25 ~~32~~, wherein at least one user-defined event discriminator is further checked against occurrences are extracted based on video primitives and non-video primitives.

35. (Currently Amended) A method ~~Application-specific hardware~~ as in claim 25 ~~32~~, wherein at least one user-defined event discriminator comprises ~~includes at least two of the following: an object, a spatial area, a temporal attribute, an interaction, or an~~ at least one alarm.

36. (Cancelled)

37. (Previously Presented) A computer-readable medium as in claim 1, wherein the video primitives are at least two of the following: a size, a shape, a color, a texture, a position, a velocity, a speed, an internal motion, a feature of a salient motion, or a feature of a scene change.

38. (Previously Presented) A computer-readable medium as in claim 1, wherein the

video primitives are at least three of the following: a size, a shape, a color, a texture, a velocity, a speed, an internal motion, a feature of a salient motion, or a feature of a scene change.

39. (Previously Presented) A computer-readable medium as in claim 1, wherein the video primitives are at least seven of the following: a classification, a size, a shape, a color, a texture, a position, a velocity, a speed, an internal motion, a motion, a salient motion, a feature of a salient motion, a scene change, a feature of a scene change, or a pre-defined model.

40. (Cancelled)

41. (Currently Amended) A computer-readable medium as in claim 40, further comprising:

code segments for determining ~~identifying~~ one or more additional user-defined event discriminators; and

code segments for checking ~~extracting event occurrences from~~ the archived video primitives against ~~using~~ at least one of the one or more additional user-defined event discriminators.

42. (Currently Amended) A computer-readable medium as in claim 1 40, wherein the ~~each video~~ primitives include ~~primitive is an observable attribute of an object viewed in the video and includes~~ at least one of the following: a size; a shape; a color; a texture; a position; a velocity; a speed; an internal motion; a feature of a salient motion; or a feature of a scene change.

43. (Currently Amended) A computer-readable medium having comprising software stored thereon for operating a video surveillance system with user-defined event discriminators, comprising code segments for operating the video surveillance system based on video primitives, wherein the code segments for operating the video surveillance system comprise:

(A) code segments for extracting video primitives from a video regardless of what or when event discriminators are defined, each video primitive extracted being independent of any user-defined event described by any user-defined event discriminators, wherein extracting video primitives comprises:

(1) identifying one or more objects in the video to obtain identified objects, each object being an item of interest in the video, wherein identifying one or more objects comprises at least one of:

(a) detecting one or more objects in the video;

(b) tracking one or more objects in the video; or

(c) classifying one or more objects in the video; and

(2) identifying at least one video primitive for each identified object in the video independent of any user-defined event described by any user-defined event discriminator, each video primitive describing a property of one of the identified objects, each property being an observable attribute of the identified object in the video; and

(B) code segments for archiving the extracted video primitives;

(C) code segments for determining one or more user-defined event discriminators, each user-defined event discriminator to detect an occurrence of a user-defined event in the video of the video surveillance system, each user-defined event comprising a description of at least one object engaged in an activity in the video, a description of at least one object engaged in an

activity having one or more spatial attributes in the video, a description of at least one object engaged in an activity having one or more temporal attributes in the video, or a description of at least one object engaged in an activity having one or more spatial attributes and one or more temporal attributes in the video, the object being an item of interest in the video;

(D) code segments for accessing the archived video primitives corresponding to a portion of the video; and

(E) code segments for checking the accessed archived video primitives against at least one of the user-defined event discriminators to determine whether any user-defined events described by the checked user-defined event discriminators occurred in the video, wherein checking the extracted video primitives comprises:

(1) comparing the properties of the video primitives with the description of the user-defined event of one of the user-defined event discriminators; and

(2) determining a user-defined event occurred in the video according to one of the user-defined event discriminators if the properties of the video primitives match the description of the user-defined event of one of the user-defined event discriminators;

wherein the archived video primitives are accessed without reprocessing the video;

wherein the code segments for extracting video primitives are different from the code segments for checking the accessed archived video primitives;

wherein the accessed archived video primitives are checked against at least one of the user-defined event discriminators without reprocessing the portion of the video.

44. (Currently Amended) A computer-readable medium as in claim 43, wherein the each video primitives include primitive is an observable attribute of an object viewed in the video and

includes at least one of the following: a size; a shape; a color; a texture; a position; a velocity; a speed; an internal motion; a feature of a salient motion; or a feature of a scene change.

45. (New) A method as in claim 25, further comprising:

(D) archiving the extracted video primitives;

wherein the archived video primitives are accessible without reprocessing the video.

46. (New) A method as in claim 25, wherein at least one user-defined event comprises a description of at least one object engaged in an activity in the video.

47. (New) A method as in claim 25, wherein at least one user-defined event comprises a description of at least one object engaged in an activity having one or more spatial attributes in the video.

48. (New) A method as in claim 25, wherein at least one user-defined event comprises a description of at least one object engaged in an activity having one or more temporal attributes in the video.

49. (New) A method as in claim 25, wherein at least one user-defined event comprises a description of at least one object engaged in an activity having one or more spatial attributes and one or more temporal attributes in the video.

50. (New) A video surveillance system as in claim 27, further comprising:

(D) means for archiving the extracted video primitives;

wherein the archived video primitives are accessible without reprocessing the video.

51. (New) A method for operating a video surveillance system with user-defined event discriminators, comprising:

(A) extracting video primitives from a video regardless of what or when event discriminators are defined, each video primitive extracted being independent of any user-defined event described by any user-defined event discriminators, wherein extracting video primitives comprises:

(1) identifying one or more objects in the video to obtain identified objects, each object being an item of interest in the video, wherein identifying one or more objects comprises at least one of:

(a) detecting one or more objects in the video;

(b) tracking one or more objects in the video; or

(c) classifying one or more objects in the video; and

(2) identifying at least one video primitive for each identified object in the video independent of any user-defined event described by any user-defined event discriminator, each video primitive describing a property of one of the identified objects, each property being an observable attribute of the identified object in the video; and

(B) archiving the extracted video primitives;

(C) determining one or more user-defined event discriminators, each user-defined event discriminator to detect an occurrence of a user-defined event in the video of the video surveillance system, each user-defined event comprising a description of at least one object

engaged in an activity in the video, a description of at least one object engaged in an activity having one or more spatial attributes in the video, a description of at least one object engaged in an activity having one or more temporal attributes in the video, or a description of at least one object engaged in an activity having one or more spatial attributes and one or more temporal attributes in the video, the object being an item of interest in the video;

(D) accessing the archived video primitives corresponding to a portion of the video; and

(E) checking the accessed archived video primitives against at least one of the user-defined event discriminators to determine whether any user-defined events described by the checked user-defined event discriminators occurred in the video, wherein checking the extracted video primitives comprises:

(1) comparing the properties of the video primitives with the description of the user-defined event of one of the user-defined event discriminators; and

(2) determining a user-defined event occurred in the video according to one of the user-defined event discriminators if the properties of the video primitives match the description of the user-defined event of one of the user-defined event discriminators;

wherein the archived video primitives are accessed without reprocessing the video;

wherein extracting video primitives is different from checking the accessed archived video primitives;

wherein the accessed archived video primitives are checked against at least one of the user-defined event discriminators without reprocessing the portion of the video.

52. (New) A video surveillance system employing user-defined event discriminators, comprising:

(A) means for extracting video primitives from a video regardless of what or when event discriminators are defined, each video primitive extracted being independent of any user-defined event described by any user-defined event discriminators, wherein the means for extracting video primitives comprises:

(1) means for identifying one or more objects in the video to obtain identified objects, each object being an item of interest in the video, wherein the means for identifying one or more objects comprises at least one of:

(a) means for detecting one or more objects in the video;

(b) means for tracking one or more objects in the video; or

(c) means for classifying one or more objects in the video; and

(2) means for identifying at least one video primitive for each identified object in the video independent of any user-defined event described by any user-defined event discriminator, each video primitive describing a property of one of the identified objects, each property being an observable attribute of the identified object in the video; and

(B) means for archiving the extracted video primitives;

(C) means for determining one or more user-defined event discriminators, each user-defined event discriminator to detect an occurrence of a user-defined event in the video of the video surveillance system, each user-defined event comprising a description of at least one object engaged in an activity in the video, a description of at least one object engaged in an activity having one or more spatial attributes in the video, a description of at least one object engaged in an activity having one or more temporal attributes in the video, or a description of at least one object engaged in an activity having one or more spatial attributes and one or more temporal attributes in the video, the object being an item of interest in the video;

(D) means for accessing the archived video primitives corresponding to a portion of the video; and

(E) means for checking the accessed archived video primitives against at least one of the user-defined event discriminators to determine whether any user-defined events described by the checked user-defined event discriminators occurred in the video, wherein the means for checking the extracted video primitives comprises:

(1) means for comparing the properties of the video primitives with the description of the user-defined event of one of the user-defined event discriminators; and

(2) means for determining a user-defined event occurred in the video according to one of the user-defined event discriminators if the properties of the video primitives match the description of the user-defined event of one of the user-defined event discriminators;

wherein the archived video primitives are accessed without reprocessing the video;

wherein the means for extracting video primitives is different from the means for checking the accessed archived video primitives;

wherein the accessed archived video primitives are checked against at least one of the user-defined event discriminators without reprocessing the portion of the video.

53. (New) A computer-readable medium having software stored thereon for operating a video surveillance system, comprising:

(A) code segments for determining one or more first user-defined event discriminators, each first user-defined event discriminator to detect an occurrence of a user-defined event in a video of the video surveillance system, each user-defined event comprising a description of at least one object engaged in an activity in the video, a description of at least one object engaged in

an activity having one or more spatial attributes in the video, a description of at least one object engaged in an activity having one or more temporal attributes in the video, or a description of at least one object engaged in an activity having one or more spatial attributes and one or more temporal attributes in the video, the object being an item of interest in the video;

(B) code segments for extracting video primitives from the video regardless of what or when event discriminators are defined, each video primitive extracted being independent of any user-defined event described by any user-defined event discriminators, wherein extracting video primitives comprises:

(1) identifying one or more objects in the video to obtain identified objects, each object being an item of interest in the video, wherein identifying one or more objects comprises at least one of:

(a) detecting one or more objects in the video;

(b) tracking one or more objects in the video; or

(c) classifying one or more objects in the video; and

(2) identifying at least one video primitive for each identified object in the video independent of any user-defined event described by any user-defined event discriminator, each video primitive describing a property of one of the identified objects, each property being an observable attribute of the identified object in the video;

(C) code segments for archiving the extracted video primitives;

(D) code segments for checking the extracted video primitives against at least one of the first user-defined event discriminators to determine whether any user-defined events described by the checked first user-defined event discriminators occurred in the video, wherein checking the extracted video primitives comprises:

(1) comparing the properties of the video primitives with the description of the user-defined event of one of the first user-defined event discriminators; and

(2) determining a user-defined event occurred in the video according to one of the first user-defined event discriminators if the properties of the video primitives match the description of the user-defined event of one of the first user-defined event discriminators;

(E) code segments for determining one or more second user-defined event discriminators, each second user-defined event discriminator to detect an occurrence of a user-defined event in the video of the video surveillance system, each user-defined event comprising a description of at least one object engaged in an activity in the video, a description of at least one object engaged in an activity having one or more spatial attributes in the video, a description of at least one object engaged in an activity having one or more temporal attributes in the video, or a description of at least one object engaged in an activity having one or more spatial attributes and one or more temporal attributes in the video, the object being an item of interest in the video;

(F) code segments for accessing the archived video primitives corresponding to a portion of the video;

(G) code segments for checking the accessed video primitives against at least one of the second user-defined event discriminators to determine whether any user-defined events described by the checked second user-defined event discriminators occurred in the video, wherein checking the accessed video primitives comprises:

(1) comparing the properties of the accessed video primitives with the description of the user-defined event of one of the second user-defined event discriminators; and

(2) determining a user-defined event occurred in the video according to one of the second user-defined event discriminators if the properties of the accessed video primitives match

the description of the user-defined event of one of the second user-defined event discriminators;

wherein the code segments for extracting video primitives are different from the code segments for checking the extracted video primitives;

wherein the accessed video primitives are checked against at least one of the second user-defined event discriminators without reprocessing the portion of the video.

54. (New) A method for operating a video surveillance system, comprising:

(A) determining one or more first user-defined event discriminators, each first user-defined event discriminator to detect an occurrence of a user-defined event in a video of the video surveillance system, each user-defined event comprising a description of at least one object engaged in an activity in the video, a description of at least one object engaged in an activity having one or more spatial attributes in the video, a description of at least one object engaged in an activity having one or more temporal attributes in the video, or a description of at least one object engaged in an activity having one or more spatial attributes and one or more temporal attributes in the video, the object being an item of interest in the video;

(B) extracting video primitives from the video regardless of what or when event discriminators are defined, each video primitive extracted being independent of any user-defined event described by any user-defined event discriminators, wherein extracting video primitives comprises:

(1) identifying one or more objects in the video to obtain identified objects, each object being an item of interest in the video, wherein identifying one or more objects comprises at least one of:

(a) detecting one or more objects in the video;

(b) tracking one or more objects in the video; or

(c) classifying one or more objects in the video; and

(2) identifying at least one video primitive for each identified object in the video independent of any user-defined event described by any user-defined event discriminator, each video primitive describing a property of one of the identified objects, each property being an observable attribute of the identified object in the video;

(C) archiving the extracted video primitives;

(D) checking the extracted video primitives against at least one of the first user-defined event discriminators to determine whether any user-defined events described by the checked first user-defined event discriminators occurred in the video, wherein checking the extracted video primitives comprises:

(1) comparing the properties of the video primitives with the description of the user-defined event of one of the first user-defined event discriminators; and

(2) determining a user-defined event occurred in the video according to one of the first user-defined event discriminators if the properties of the video primitives match the description of the user-defined event of one of the first user-defined event discriminators;

(E) determining one or more second user-defined event discriminators, each second user-defined event discriminator to detect an occurrence of a user-defined event in the video of the video surveillance system, each user-defined event comprising a description of at least one object engaged in an activity in the video, a description of at least one object engaged in an activity having one or more spatial attributes in the video, a description of at least one object engaged in an activity having one or more temporal attributes in the video, or a description of at least one object engaged in an activity having one or more spatial attributes and one or more temporal

attributes in the video, the object being an item of interest in the video;

(F) accessing the archived video primitives corresponding to a portion of the video;

(G) checking the accessed video primitives against at least one of the second user-defined event discriminators to determine whether any user-defined events described by the checked second user-defined event discriminators occurred in the video, wherein checking the accessed video primitives comprises:

(1) comparing the properties of the accessed video primitives with the description of the user-defined event of one of the second user-defined event discriminators; and

(2) determining a user-defined event occurred in the video according to one of the second user-defined event discriminators if the properties of the accessed video primitives match the description of the user-defined event of one of the second user-defined event discriminators;

wherein extracting video primitives is different from checking the extracted video primitives;

wherein the accessed video primitives are checked against at least one of the second user-defined event discriminators without reprocessing the portion of the video.

55. (New) A video surveillance system, comprising:

(A) means for determining one or more first user-defined event discriminators, each first user-defined event discriminator to detect an occurrence of a user-defined event in a video of the video surveillance system, each user-defined event comprising a description of at least one object engaged in an activity in the video, a description of at least one object engaged in an activity having one or more spatial attributes in the video, a description of at least one object engaged in an activity having one or more temporal attributes in the video, or a description of at least one

object engaged in an activity having one or more spatial attributes and one or more temporal attributes in the video, the object being an item of interest in the video;

(B) means for extracting video primitives from the video regardless of what or when event discriminators are defined, each video primitive extracted being independent of any user-defined event described by any user-defined event discriminators, wherein the means for extracting video primitives comprises:

(1) means for identifying one or more objects in the video to obtain identified objects, each object being an item of interest in the video, wherein the means for identifying one or more objects comprises at least one of:

(a) means for detecting one or more objects in the video;

(b) means for tracking one or more objects in the video; or

(c) means for classifying one or more objects in the video; and

(2) means for identifying at least one video primitive for each identified object in the video independent of any user-defined event described by any user-defined event discriminator, each video primitive describing a property of one of the identified objects, each property being an observable attribute of the identified object in the video;

(C) means for archiving the extracted video primitives;

(D) means for checking the extracted video primitives against at least one of the first user-defined event discriminators to determine whether any user-defined events described by the checked first user-defined event discriminators occurred in the video, wherein the means for checking the extracted video primitives comprises:

(1) means for comparing the properties of the video primitives with the description of the user-defined event of one of the first user-defined event discriminators; and

(2) means for determining a user-defined event occurred in the video according to one of the first user-defined event discriminators if the properties of the video primitives match the description of the user-defined event of one of the first user-defined event discriminators;

(E) means for determining one or more second user-defined event discriminators, each second user-defined event discriminator to detect an occurrence of a user-defined event in the video of the video surveillance system, each user-defined event comprising a description of at least one object engaged in an activity in the video, a description of at least one object engaged in an activity having one or more spatial attributes in the video, a description of at least one object engaged in an activity having one or more temporal attributes in the video, or a description of at least one object engaged in an activity having one or more spatial attributes and one or more temporal attributes in the video, the object being an item of interest in the video;

(F) means for accessing the archived video primitives corresponding to a portion of the video;

(G) means for checking the accessed video primitives against at least one of the second user-defined event discriminators to determine whether any user-defined events described by the checked second user-defined event discriminators occurred in the video, wherein the means for checking the accessed video primitives comprises:

(1) means for comparing the properties of the accessed video primitives with the description of the user-defined event of one of the second user-defined event discriminators; and

(2) means for determining a user-defined event occurred in the video according to one of the second user-defined event discriminators if the properties of the accessed video primitives match the description of the user-defined event of one of the second user-defined event discriminators;

wherein the means for extracting video primitives is different from the means for checking the extracted video primitives;

wherein the accessed video primitives are checked against at least one of the second user-defined event discriminators without reprocessing the portion of the video.